

**Environmental Assessment  
Finance Docket No. 34002**

**ALAMO NORTH TEXAS RAILROAD CORPORATION  
CONSTRUCTION AND OPERATION EXEMPTION  
IN WISE COUNTY, TEXAS**

Prepared by:

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## **CONCLUSION**

This Environmental Assessment evaluates the potential environmental impacts of the proposed construction and operation of a rail line by Alamo North Texas Railroad Corporation (Alamo North). The proposal involves the construction and operation of a 2.25-mile rail line from the Chico quarry to a connection with the Union Pacific Railroad Company. This environmental analysis preliminarily concludes that, based on all information available to date, the proposal would not significantly affect the quality of the human environment if the recommended mitigation measures set forth in Chapter 6 are implemented. Accordingly, the Surface Transportation Board's (Board) Section of Environmental Analysis (SEA) recommends that, if the Board approves this project, the Board impose conditions requiring Alamo North to implement the mitigation measures in Chapter 6. SEA will consider all comments received in response to this environmental document in making its final recommendations to the Board.

## **EXECUTIVE SUMMARY**

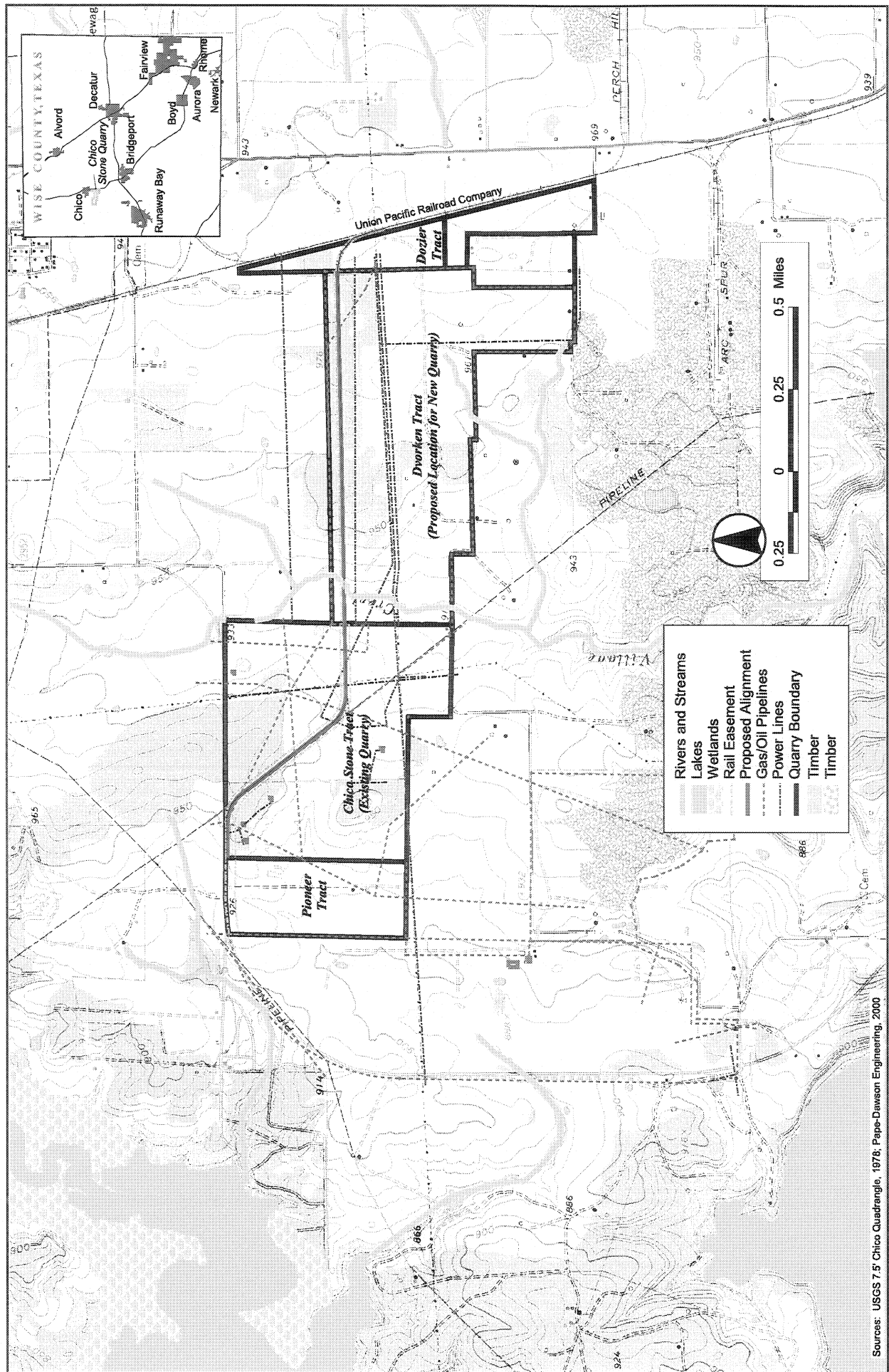
### **Background**

On August 28, 2001, Alamo North Texas Railroad Corporation (Alamo North) filed a petition for exemption under 49 U.S.C. 10502 seeking exemption from the requirements of 49 U.S.C. 10901 with the Surface Transportation Board (Board) in Finance Docket No. 34002 for authorization to construct and operate a rail line approximately 2.25 miles in length in Wise County, Texas. (See Appendix F.) On November 16, 2001, the Board granted conditional approval of Alamo North's petition, subject to the Board's further consideration of the anticipated environmental impacts of the proposal. Upon completion of the environmental review, the Board will issue a decision addressing the entire record before it, including the environmental analysis, and making the exemption effective at that time, if appropriate, thereby allowing construction to begin. If completed, the rail line would permit Alamo North to transport crushed limestone aggregates (about 2 million tons per year) from the Chico quarry to their destination. Most customers are located within 70 miles of the quarry. (See Figure ES-1.)

The Chico quarry has been in operation for 14 years producing limestone aggregates for highway and other construction projects. To date, the quarry's entire product has been transported by truck to customer locations, which are primarily in the Dallas-Fort Worth area. However, truck transportation of limestone aggregates is becoming increasingly inefficient and uneconomical for distances above 50 miles. Alamo North is interested in selling its products beyond its present market in the Dallas-Forth Worth area to other markets, including the Houston market.

### **Framework for the Environmental Assessment Preparation**

This Environmental Assessment (EA) addresses the potential impacts associated with the proposed rail line construction and operation. The Board's environmental rules are set forth at 49 CFR Part 1105. Under 49 CFR 1105.6(a), rail construction proposals generally require the preparation of an Environmental Impact Statement (EIS). The Board's rules at 1105.6(d) permit applicants to submit waivers of the EIS requirements, allowing the Board's Section of Environmental Analysis (SEA), the office responsible for conducting the environmental review, to prepare EAs for rail line constructions, if appropriate. On June 26, 2001, Alamo North submitted a written request for a waiver of the preparation of an EIS. On July 12, 2001, SEA granted a waiver from the requirement to prepare an EIS pursuant to 49 CFR 1105.6(d). SEA based this decision on the information available to date, and concluded that the preparation of an EA was the appropriate level of environmental review. (See correspondence in Appendix F.)



Sources: USGS 7.5' Chico Quadrangle, 1978; Pape-Dawson Engineering, 2000





On July 26, 2001, Alamo North submitted a letter to SEA requesting that SEA limit detailed review in the EA to Alamo North's proposed route. On August 8, 2001, SEA granted this request. (See Appendix F.) SEA's reasons for granting the request were based on careful review of the proposal and all information to date, which indicated that the other alternative routes considered would have similar environmental impacts. The other routes would also interfere more with quarry operations and, because of their longer lengths, could have greater environmental impacts than the proposed route.

URS Corporation in Austin, Texas was retained by Alamo North to act as the independent third party consultant in the preparation of the EA. See 49 CFR 1105.4 (j). Under the direction, supervision, and approval of SEA, the third party consultant develops the technical data required to complete the environmental review of the proposed action and assists in the preparation of the EA. Alamo North's request for the use of a third party consultant and SEA's response are provided in Appendix F.

### **Statement of Proposed Action**

The proposed construction and operation is discussed briefly below and in more detail in Chapters 1 and 3.

Alamo North plans to construct a 2.25-mile rail line to connect the Chico quarry with an existing Union Pacific Railroad Company (UP) rail line. Martin Marietta Materials Southwest, Ltd. (MMM Southwest), Alamo North's parent company and the operator of the Chico quarry, plans to develop a new quarry on leased property adjacent to the existing quarry (Dvorken tract), which the proposed rail line would traverse. According to MMM Southwest, its plans to build a new quarry are unrelated to construction of the new rail line. Currently, the Chico quarry produces 4 million tons per year of stone. When construction of the rail line is complete, the production from the existing and the new quarry would be 6 million tons per year and Alamo North estimates that the new rail line would carry 33 percent of the output of the two quarries. This would amount to about 300 70-car trains a year or approximately six trains a week, including both outbound and inbound traffic.

Based on 2 million tons by truck and 24 tons per truck load (about 33 percent of 6 million), Alamo North estimates that almost 83,300 truckloads of crushed limestone aggregate materials would be removed from roadways per year. In addition, costs of truck transport are estimated at 10-12 cents per ton-mile, while rail is estimated at 3-4 cents per ton-mile.

## **Description of the Affected Environment**

Existing environmental conditions that would be affected by the proposed construction and operation are described in Chapter 4 and summarized in the following paragraphs.

Land uses in the project area are classified as strip mines, quarries, and gravel pits; herbaceous rangeland; and cropland and pasture (U.S. Geological Survey, 2001). The proposed rail line crosses gas and oil pipelines at nine locations, and shares a right-of-way with gas pipelines for about 0.75 miles.

The project area is located just downstream of Lake Bridgepoint. The proposed new rail construction would cross a single intermittent stream: Village Creek, a 63-mile tributary of the West Fork Trinity River Basin. This crossing is the sole portion of the proposed alignment located within a Federal Emergency Management Agency 100-year floodplain and floodway designation. On June 14, 2001, SEA conducted a field reconnaissance of the area and concluded that there are no wetlands in the project area.

A general overview of the area indicates that while there is potential for wildlife habitat, past and present mining activities have limited habitat in the surrounding areas and have had an effect on the fauna in the project area. With respect to threatened and endangered species in the project area, all of the species, except two bird species — the black-capped vireo and the interior least tern — are migratory within the area and would only occur in the Wise County area as transients. Nesting requirements for the black-capped vireo are highly specific to limestone drainages and dense thickets that are not present in the project area. Although it is highly unlikely that nesting habitat is present in the project area, SEA is recommending a mitigation condition requiring Alamo North to notify the U.S. Fish and Wildlife Service (FWS) if suitable vireo habitat is found during construction. The interior least tern typically is found on sand bars with a gravel substrate along rivers, and therefore, would be unlikely to be present in the project area.

The Texas Department of Transportation (TxDOT) has indicated that the proposed action and its alternatives would not cross any state maintained roadways. In addition, TxDOT has no plans for a new facility within the areas designated. The proposed action would cross one dirt county road (FM 1539), which connects two county roads and runs by the main entrance of the quarry. However, Wise County may abandon FM 1539 to adjacent landowners in the near future.

MMM Southwest has constructed a private road that lies several hundred feet from and runs parallel to the right-of-way of the proposed rail line, providing an alternate means of access from State Highway 201 to the Chico quarry. MMM Southwest plans to open this road in the near future. (See Figure 3-1.)

Train traffic and quarry operations are the primary sources of noise in the area along the route of the proposed action. Because of the industrial character of the area and the limited number of noise receptors (defined as residences, schools, libraries, nursing homes, and hospitals), noise would not be an issue for the proposed project.

According to SEA's archeological survey, the right-of-way does not impact any standing structures, nor were any archaeological sites found along the impacted area. Based on the results of SEA's archeological survey, discussed in more detail in Section 4.9, SEA believes that the likelihood of buried sites is very small. The Texas Historical Commission has submitted comments stating that the proposed project would not affect any historic properties and that the project may proceed. (See Appendix A.) No parkland and/or water recreational facilities are near the site of the proposed construction or should be affected by the proposed rail extension.

SEA considered Federal statutes, regulations, and executive orders, and coordinated and consulted with appropriate agencies to ensure that they were notified of the proposed action and had adequate opportunity to provide comments during preparation of the EA. After SEA considers all comments received on this EA, reviews all other available environmental information, and conducts additional environmental analysis where appropriate, SEA will prepare a Post EA containing SEA's final environmental analysis and recommended environmental mitigation. The Board will consider the entire environmental record including the EA, Post EA, and all comments in making its final decision on Alamo North's Petition.

### **Synopsis of Environmental Impacts of the Proposed Action**

Generally, there will be few, if any negative environmental impacts associated with the proposed construction and operation. The area surrounding the proposed construction is industrial and it has been intensely used for quarry operations for about 50 years. There are no archeological resources in the area. In addition, the project area does not meet environmental justice community of concern criteria, as defined in Section 5.1.3, and, therefore, the proposed new rail construction would not cause disproportionately high and adverse human health or environmental effects on minority and low income populations in the vicinity of the proposed

action. Chapter 6 describes SEA's recommendations to mitigate the few potential impacts of the proposed project.

### **Alternatives Considered**

Alternatives to the proposed construction and operation are discussed briefly below and in more detail in Chapter 3.

The route of the proposed rail line is the shortest route between the existing quarry and the UP line. (See Figure ES-1.) During the planning phase of this project, Alamo North explored three alternative routes. Alamo North also considered alternative means of transporting quarried materials to the UP line. Although Alamo North considered a conveyor alternative, it rejected it due to the economic cost of building and maintaining the several miles of belts, idlers, and idler tables.

SEA reviewed the proposal and all available information and determined that Alamo North's proposed route and the other possible alternative routes would have similar environmental impacts. In Citizens Against Burlington v. Busey, 938 F.2d 190 (D.C. Cir. 1991), the court held that agencies have discretion under the National Environmental Policy Act to explore and evaluate a reasonable range of alternatives designed to meet the purpose and need of the applicant's proposal.

SEA determined that Alamo North's proposed route appeared to be the most viable option for the project. The other possible routes would be longer and would have no apparent environmental advantages over the proposed route. The proposed route would minimize interference with quarrying operations by following the northern boundary of the eastern parcel of land leased by MMM Southwest. Additionally, the proposed route would support the greatest access to Dvorken reserves, which is the area for the proposed new quarry, and it would place the track in close proximity to crushing operations. Therefore, SEA decided to grant Alamo North's request to limit detailed review in the EA to Alamo North's proposed route. (See Appendix F.)

## **Recommendations for Mitigation and Request for Public Comment**

Chapter 6 discusses in further detail the mitigation requested by the various parties consulted in the process of preparing this environmental document and sets out the mitigation measures recommended by SEA. Based on SEA's review of all information available to date, and its independent analysis of the proposed rail construction and operation, all the comments and mitigation requested by various Federal, state, and local agencies, and other concerned parties, and the mitigation offered by Alamo North, SEA preliminarily recommends that if the Board grants final approval of the proposed construction and operation, such approval be subject to the following conditions:

### **Biological Resources**

1. Alamo North shall avoid the potential for harassment of black-capped vireo by scheduling construction activities outside of the vireo nesting and breeding season, which generally runs from March through August. However, if construction is to occur between March and August, in accordance with the recommendations of the U.S. Fish and Wildlife Service (FWS), Alamo North shall check action areas for the presence of suitable vireo habitat. If suitable habitat is discovered, Alamo North shall contact the appropriate office of FWS in Texas to discuss the need to conduct presence/absence surveys.
2. Alamo North shall consult with Celeste Brancel-Brown of the Texas Parks and Wildlife Department prior to construction regarding known locations and potential adverse impacts to sensitive species and natural communities near the proposed project area. Based on additional recommendations of the Texas Parks and Wildlife Department, Alamo North shall:
  - A) Minimize clearing of riparian vegetation to the greatest extent possible and use enhanced erosion control measures to reduce potential of sedimentation into water bodies associated with culverts. Revegetation plans for the disturbed areas shall include the use of site-specific native plant species that have high erosion control as well as high value for wildlife. Replacement of lost vegetation along the water bodies, especially trees and brush species, shall occur at a 2:1 ratio.
  - B) Construct the proposed railroad in a manner that minimizes the disturbance to existing vegetation. In particular, the line shall be routed to minimize the removal of mature trees or brush in the area. Revegetation efforts at any staging areas and other disturbed areas not directly associated with the actual railroad operations shall emphasize establishment of native trees, grasses, and leguminous forbs. Enhancement of existing native grasses or prairie remnants

shall be assisted by the reseeding of exposed areas with a mixture of native grasses and limited mowing practices.

### **Transportation**

3. In the event that County Road FM 1539 remains open, Alamo North shall consult with Wise County and install appropriate grade crossing safety devices prior to initiating rail operations.

### **Stream Crossing**

4. Based on the recommendations of the U.S. Army, Corps of Engineers (COE), Alamo North shall make every attempt to restore the natural contours at the Village Creek crossing to preserve existing ground elevations and flow path. No above ground fill shall be placed within the 100-year floodplain.
5. Based on the recommendations of COE, Alamo North shall reseed the area around Village Creek with natural vegetation as soon as it is practicable to allow for permanent stabilization.
6. Alamo North shall abide by all terms and conditions of COE Nationwide Permit 14.
7. For any changes along the proposed route that encroach into the 100-year floodplain, Alamo North shall comply with Federal Emergency Management Agency regulations and shall coordinate these changes with the local floodplain administrator.

### **Pipeline Crossing**

8. Alamo North shall consult with the owners of each of the pipelines along the right-of-way prior to construction to ensure appropriate construction plans for rail-pipeline crossings, and to determine what safety concerns need to be addressed.

### **Erosion Control**

9. Alamo North shall consult with the U.S. Environmental Protection Agency and the Texas Natural Resource Conservation Commission prior to construction, prepare a stormwater pollution prevention plan to mitigate stormwater runoff impacts, and apply for coverage under the general stormwater construction permit from the appropriate agency.

## **Land Use**

10. Where construction of the proposed rail line would cause unavoidable property severance, Alamo North shall negotiate with the appropriate land owner and provide access to the severed property.

## **Agency Notification Activities and EA Comment Process**

After full consideration of all agency and public comments received on the EA, SEA will conduct any additional analysis that is necessary, review all environmental information available to date, and consult further with agencies or the public, as appropriate. SEA will then prepare a Post EA for consideration by the Board, which will include its final recommended mitigation for the proposed rail line construction. The Board will then consider the entire environmental record, including this EA, the Post EA, and all comments received in making its final decision in this case regarding the proposed rail line.

## **How to Submit Comments**

SEA encourages the public to participate in the environmental review of Alamo North's proposed activities by commenting on the EA during the 30-day comment period. Comments may be submitted to the address below. When submitting comments, please provide one original and ten copies to:

Office of Secretary  
Case Control Unit  
STB Finance Docket No. 34002  
Surface Transportation Board  
1925 K Street, NW  
Washington, DC 20423-0001

The following information should appear in the lower left-hand corner of the envelope:

Attention: Rini Ghosh  
Attorney-Adviser  
Environmental Filing

If you have questions regarding this EA, you should contact Rini Ghosh, the environmental contact for this case by phone at (202) 565-1539, fax at (202) 565-9000, or e-mail at [ghoshr@stb.dot.gov](mailto:ghoshr@stb.dot.gov).



Recent events involving a principal postal facility within Washington, D.C., may affect for a period of time the receipt of materials mailed to the Board, as well as customer receipt of reply mail sent from the Board. Until the timely delivery of mail has been reestablished, SEA requests that individuals filing comments regarding this or other environmental assessments take the following additional steps to ensure receipt of their correspondence during the comment period:

1. Telephone or e-mail the environmental contact indicated above prior to the close of the comment period and inform them that you have mailed a comment.
2. If the comment has not been received, the environmental contact will discuss alternative modes of delivery.
3. Retain a copy of your comment for your records should alternative modes of delivery need be necessary.

SEA is committed to carrying out its duties to the public and regrets any inconvenience these new procedures may cause.

Date made available to the public: April 12, 2002

Comment due date: May 10, 2002

## **GUIDE TO THE ENVIRONMENTAL ASSESSMENT**

This Environmental Assessment evaluates the potential environmental impacts that could result from the proposed construction and operation of a rail line by Alamo North Texas Railroad Corporation. The Surface Transportation Board's Section of Environmental Analysis, has prepared this document in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321), the Council on Environmental Quality regulations implementing NEPA (40 CFR Part 1500), the Board's environmental rules (49 CFR Part 1105), and other applicable environmental statutes and regulations.

## **1.0 INTRODUCTION AND BACKGROUND**

Chapter 1 describes the purpose and need for the proposed construction and operation of Alamo North Texas Railroad Corporation's (Alamo North) new rail line. It describes the environmental review process for the project and discusses the Surface Transportation Board's (Board) Section of Environmental Analysis's (SEA) role in conducting the environmental review. Chapter 1 also highlights the role of other Federal, state, and local agencies, parties of record, communities, and other interested parties.

### **1.1 Surface Transportation Board's Jurisdiction**

On August 28, 2001, Alamo North filed a petition for exemption with the Board in Finance Docket No. 34002 under 49 U.S.C. 10502 seeking exemption from the requirements of 49 U.S.C. 10901 to authorize Alamo North to construct and operate a rail line approximately two miles in length in Wise County, Texas. Alamo North is a recently formed Texas railroad corporation, and is a subsidiary of Martin Marietta Materials Southwest, Ltd. (MMM Southwest), a Texas limited partnership. Granting this petition is considered a major Federal action under the National Environmental Policy Act and requires the completion of the environmental review process before a final decision can be issued.

On November 16, 2001, the Board granted conditional approval to Alamo North's exemption petition, subject to the Board's further consideration of the anticipated environmental impacts of the proposal. Upon completion of the environmental review, the Board will issue a decision addressing the entire record before it, including the environmental analysis, and making the exemption effective at that time, if appropriate, thereby allowing construction to begin.

The Board's environmental rules are set forth at 49 CFR Part 1105. Under 49 CFR 1105.6(a), rail construction proposals generally require the preparation of an Environmental Impact Statement (EIS). The Board's rules at 1105.6(d) permit applicants to submit waivers of the EIS requirements, allowing SEA, the office responsible for conducting the environmental review, to prepare Environmental Assessments (EA) for rail line constructions, if appropriate. On June 26, 2001, Alamo North submitted a written request for a waiver of the preparation of an EIS. On July 12, 2001, SEA granted a waiver from the requirement to prepare an EIS pursuant to 49 CFR 1105.6(d). (See Appendix F.) SEA based this decision on the information available to date, and concluded that preparation of an EA was the appropriate level of environmental review. (See Appendix F.)

On July 26, 2001, Alamo North submitted a letter to SEA requesting that SEA limit detailed review in the EA to Alamo North's proposed route. On August 8, 2001, SEA granted this request. (See Appendix F.) SEA's reasons for granting the request were based on careful review of the proposal and all information to date, which indicated that the other alternative routes considered would have similar environmental impacts. The other routes would also interfere more with quarry operations and, because of their longer lengths, could have greater environmental impacts than the proposed route.

URS Corporation in Austin, Texas was retained by Alamo North to act as the independent third party consultant in the preparation of the EA. See 49 CFR 1105.4 (j). Under the direction, supervision, and approval of SEA, the third party consultant develops the technical data required to complete the environmental review of the proposed action and assists in the preparation of the EA. Alamo North's request for the use of a third party consultant and SEA's response are provided in Appendix F.

## **1.2 Purpose and Need**

MMM Southwest and its subsidiaries produce limestone aggregates from quarries in the southwestern United States. One of MMM Southwest's quarries is near Chico, Texas, which is about 50 miles northwest of Fort Worth, Texas. This quarry has been in operation for 14 years producing limestone aggregates for highway and other construction projects. To date, the quarry's entire product has been transported by truck to customer locations, primarily in the Dallas-Fort Worth area. However, truck transportation of limestone aggregates is becoming increasingly inefficient and uneconomical for distances above 50 miles. Ninety percent of the Chico quarry's current customers are within 70 miles of the quarry.

Alamo North was recently formed for the purpose of constructing and operating a rail line to transport limestone aggregates from the Chico quarry to a connection with the Union Pacific Railroad Company, approximately two miles from the quarry. This would enable MMM Southwest to sell its product beyond its present market in the Dallas-Fort Worth area, including the Houston market. It would also enable MMM Southwest to serve some of its existing customers by rail, which would be much more efficient and economical than serving them by truck. MMM Southwest would also be able to deliver sand and other products to its customers, in addition to limestone from the Chico quarry, which it could backhaul in cars used for outbound movements of limestone. Alamo North is a common carrier holding itself out to the public to provide rail service, and it would be available to serve any other quarries or industries that may locate on or near its line in the future.

MMM Southwest is in the process of installing new equipment that would increase the production capacity of the Chico quarry, and it also plans to develop a new quarry on leased property adjacent to the existing quarry (Dvorken tract), which the proposed rail line would traverse. According to MMM Southwest, its plans to build a new quarry are unrelated to the construction of the new rail line. Currently, the Chico quarry produces 4 million tons per year of limestone. When construction of the rail line is complete, the production from the existing and the new quarry would be 6 million tons per year and Alamo North estimates that it would carry about 33 percent of the output of the two quarries. This would amount to about 300 70-car trains a year, or approximately six trains a week. This estimate includes backhaul of the sand and other products, as well as empty backhauls.

Based on 2 million tons by truck and 24 tons per truck load (33 percent of 6 million), Alamo North estimates that almost 83,300 truckloads of crushed limestone aggregate and similar materials would be removed from roadways per year. In addition, costs of truck transport are estimated at 10-12 cents per ton-mile, while rail is estimated at 3-4 cents per ton-mile.



## **2.0 OVERVIEW OF ENVIRONMENTAL REVIEW PROCESS AND PUBLIC PARTICIPATION**

This chapter provides an overview of the Surface Transportation Board's (Board) role, and that of other parties, in the environmental review process, as well as information about public participation.

### **2.1 The Surface Transportation Board**

The Board is a decisionally independent adjudicatory agency, which is organizationally housed within the U.S. Department of Transportation. The Board has jurisdiction over certain rail transportation matters such as rail rates, financial transactions, mergers, rail construction projects, and the abandonment of rail service. The Interstate Commerce Commission (ICC) Termination Act of 1995<sup>1</sup> established the Board to assume some of the rail regulatory functions that the former ICC had administered. In all of its decisions, the Board is committed to advancing the national transportation policy goals established by Congress.<sup>2</sup>

In conducting environmental reviews, the Board must consider the requirements of the National Environmental Policy Act (NEPA) and the Council on Environmental Quality's implementing regulations, as well as the former ICC's environmental regulations implementing NEPA at 49 CFR 1105, which the Board has adopted.

### **2.2 Role of the Section of Environmental Analysis**

The Section of Environmental Analysis (SEA) is the office within the Board responsible for fulfilling the Board's responsibilities under NEPA and related environmental laws. Pursuant to the Board's environmental responsibilities, SEA has conducted an environmental analysis of Alamo North Texas Railroad Corporation's (Alamo North) proposed construction and presents its findings in this Environmental Assessment (EA). URS Corporation (URS), the independent third-party contractor in this case, has assisted in the preparation of the EA, with SEA's oversight, guidance, and approval. In effect, URS has served as an extension of SEA's staff in the preparation of the independent environmental analysis. Throughout the process, SEA has provided appropriate oversight and guidance to URS.

Consulting with other Federal, state, and local agencies and involving the public are important to SEA's environmental review process. SEA considered Federal statutes, regulations,

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<sup>1</sup> Public L. 104-88. 109 Stat. 803 (1995).

<sup>2</sup> See 49 U.S.C. 10101 *et seq.*

and executive orders, and coordinated and consulted with appropriate agencies to ensure that they were notified of the proposed action and had adequate opportunity to provide comments during preparation of the EA. After SEA considers all comments received on this EA, reviews all other available environmental information, and conducts additional environmental analysis where appropriate, SEA will prepare a Post EA containing SEA's final environmental analysis and recommended environmental mitigation. The Board will consider the entire environmental record including the EA, Post EA, and all comments in making its final decision on Alamo North's Petition.

## **2.3 Roles of Other Parties**

### **2.3.1 Alamo North Texas Railroad Corporation**

Alamo North has provided information on its proposed railroad construction and operations and the anticipated environmental effects. If the Board grants the proposed action with conditions, including environmental conditions, Alamo North would be responsible for implementing any conditions the Board may impose.

### **2.3.2 Other Agencies**

SEA conducted agency consultation activities to inform Federal, state, and local government agencies about the proposed action. SEA consulted with appropriate agencies through correspondence and telephone consultation. (See Appendix A.) SEA gathered data and information about the study area and assessed the comments that the agencies submitted. SEA will carefully consider the comments of other agencies in preparing the Post EA and in making its final mitigation recommendations to the Board, which will exercise its authority with due regard for the jurisdiction and expertise of other Federal agencies.

1. **U.S. Environmental Protection Agency (EPA)**- EPA has broad oversight and implementing responsibilities for many environmental laws, including the Clean Air Act; Clean Water Act; Comprehensive Environmental Response, Compensation, and Liability Act; and Superfund Amendment and Reauthorization Act.
2. **U.S. Army Corps of Engineers (COE)**- COE is responsible for maintaining and operating certain navigation and flood control projects. In addition, under Section 404 of the Clean Water Act, COE is responsible for regulating the discharge of dredge and fill materials into the nation's waters, including wetlands.
3. **Advisory Council on Historic Preservation (ACHP)**- ACHP is responsible for overseeing the duties of Federal agencies under the National Historic Preservation Act

(NHPA). The NHPA requires Federal agencies to consider the effects of their actions on historic and cultural resources.

4. **U.S. Fish and Wildlife Service (FWS)**- FWS is the Federal agency with primary responsibility for fish, wildlife, and natural resources issues. FWS is also responsible for implementing the Endangered Species Act, and through its regional offices, for consulting with other Federal agencies on potential impacts to threatened and endangered species.
5. **Natural Resources Conservation Service (NRCS)**- This agency, formerly the Soil Conservation Service, is charged with protecting farmlands, particularly those classified as prime, unique, or of state or local importance.
6. **Federal Emergency Management Agency (FEMA)**- FEMA identifies 100-year floodplains. Consultation with FEMA is intended to verify compliance with the National Flood Insurance Act of 1988 and Executive Order 11988, concerning construction in floodplains.

In addition, comments have been requested from the following Texas state agencies, local governments and organizations with respect to highway, natural resources and other potential impacts of the Alamo North proposal:

- Texas Parks and Wildlife.
- Texas General Land Office.
- Texas Department of Transportation.
- Texas Water Development Board.
- Texas Natural Resource Conservation Commission.
- Wise County Judge.
- Decatur City Administrator.
- Texas Historic Commission.
- Chico Independent School District.

Several of these parties have submitted comments in response to a consultation letter forwarded to them in the course of preparing this EA. These comments are set forth in Appendix A.

## **2.4 Scope of Environmental Review**

SEA has evaluated the environmental effects of the proposed Alamo North rail project for the following areas:



- Social and economic effects.
- Land use.
- Environmental justice.
- Physical setting.
- Water resources.
- Biological resources.
- Transportation.
- Air quality.
- Noise.
- Cultural resources.
- Recreation resources.
- Safety and Health.
- Cumulative effects.

## **2.5 Agency Notification Activities and Environmental Assessment Comment Process**

After full consideration of all agency and public comments received on the EA, SEA will conduct any additional analysis that is necessary, review all environmental information available to date, and consult further with appropriate agencies and the public, if appropriate. SEA will then prepare a Post EA, which will include its final recommendations to the Board regarding potential environmental impacts and recommended mitigation for the proposed rail line. The Board will then consider the entire environmental record, including this EA, the Post EA, and all comments received in making its final decision in this case regarding the proposed rail line.

## **2.6 How to Submit Comments**

SEA encourages the public to participate in the environmental review of Alamo North's proposed activities by commenting on the EA during the 30-day comment period. Comments may be submitted to the address below. When submitting comments, please provide one original and ten copies to:

Office of the Secretary  
Case Control Unit  
STB Finance Docket No. 34002  
Surface Transportation Board  
1925 K Street, NW  
Washington, DC 20423-0001

The following information should appear in the lower left-hand corner of the envelope:

Attention: Rini Ghosh  
Attorney-Adviser  
Environmental Filing

If you have questions regarding this EA, you should contact Rini Ghosh, the environmental contact for this case by phone at (202) 565-1539, fax at (202) 565-9000, or e-mail at [ghoshr@stb.dot.gov](mailto:ghoshr@stb.dot.gov).

Recent events involving a principal postal facility within Washington, D.C., may affect for a period of time the receipt of materials mailed to the Board, as well as customer receipt of reply mail sent from the Board. Until the timely delivery of mail has been reestablished, SEA requests that individuals filing comments regarding this or other environmental assessments take the following additional steps to ensure receipt of their correspondence during the comment period:

1. Telephone or e-mail the environmental contact indicated above prior to the close of the comment period and inform them that you have mailed a comment.
2. If the comment has not been received, the environmental contact will discuss alternative modes of delivery.
3. Retain a copy of your comment for your records should alternative modes of delivery need be necessary.

SEA is committed to carrying out its duties to the public and regrets any inconvenience these new procedures may cause.

Date made available to the public: April 12, 2002

Comment due date: May 10, 2002



### **3.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES**

#### **3.1 Proposed Route**

The proposed rail line would require a single-track extending westward across existing woods and pasturelands to connect to the Chico quarry, as shown in Figure 3-1. The area is mostly rural with extensive surface mining and oil and gas production activity. Most of the right-of-way would be on land leased by Martin Marietta Materials Southwest, Ltd. (MMM Southwest), including a tract (Dvorken tract) on which MMM Southwest plans to develop a new quarry. The land leased by MMM Southwest includes both the Chico Stone and Dvorken tracts. The existing quarry is located in the Chico Stone tract. (See aerial photograph Appendix B.) The line would not traverse any residential or recreational areas. The proposed route would cross only one small drainage feature with intermittent seasonal flow.

#### **3.2 Description of Construction Activities**

Alamo North Texas Railroad Corporation's (Alamo North) proposed construction of the 2.25-mile line of railroad from the Chico quarry to a connection with the Union Pacific Railroad Company (UP) would take place in two phases. These activities would include: preparation of the right-of-way, roadbed construction, installation of culverts, track and switch construction, and surface, line, and grade crossing construction, if applicable. Construction materials will be delivered to the quarry through the same routes through which materials are currently delivered. (See Figure 3-1.)

##### **Phase I**

Initial activities would include grubbing and cleaning the right-of-way using a bulldozer for grubbing, and a front-end loader to load and haul materials removed from the site. During the roadbed construction, scrapers and graders would build the roadbed to UP's specifications. The site would be compacted and culverts would be placed according to UP's specifications.

##### **Phase II**

Sub-ballast would be placed and distributed using bulldozers, scrapers and graders. Track and switch construction would be initiated using backhoe, pneumatic equipment and manual tools. Upon completion of track segments, the ballast would be placed using loaders and the track would be raised to typical standards. Upon completion of ballast placement including track and switch construction, surface and line activities would be performed using tamping and ballast regulating equipment. Grade crossing activities, if necessary, would be performed using backhoe, and possibly pneumatic equipment and/or manual tools.



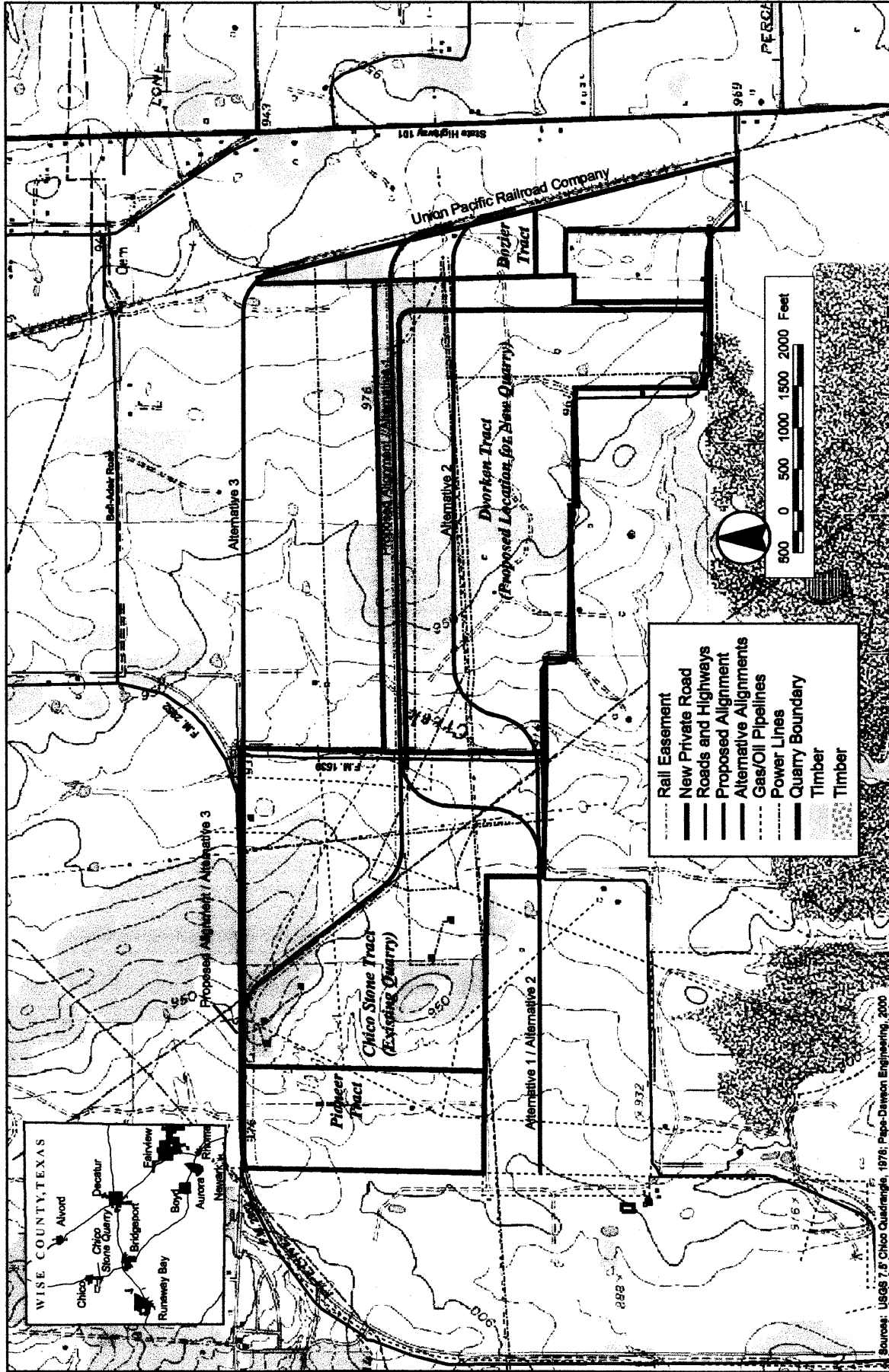


Figure 3-1 Alternative Rail Alignments and Existing Truck Routes



Alamo North estimates that the construction would take 6 months.

Phase I

- a. Right-of-Way - 2.5 months
  - 1. Grubbing and clearing brush
  - 2. Roadbed excavation and embankment construction
  - 3. Installation of culverts

Phase II

- a. Sub-grade - 1 month
- b. Sub-ballast - 1 month
- c. Track - 1.5 months
  - 1. Laying ties and rail
  - 2. Constructing bridge(s)
  - 3. Constructing switch panels

Cut and fill volumes have not been determined. However, the source of fill would originate from the adjacent quarry while the disposal of the cut volumes would be used for the construction of the earthen berms. Construction costs are estimated to be in the \$135 to \$150 per track foot range with an estimated breakout to be approximately 65 percent material and 35 percent labor. The estimated average number of workers to be employed is described below:

Phase I - 4 workers for approximately 2 months

Phase II - 6 workers for approximately 4 months

### **3.3 Description of Maintenance and Operation Activities**

Alamo North intends to operate the proposed rail line to transport crushed limestone aggregates, sand and similar materials from the quarry to their destination. However, there remains the possibility that Alamo North could provide rail services for other adjacent mining operations. Because these rail operations are speculative, they are not analyzed in this EA.

Alamo North intends to use typical models of locomotives such as EMD 1500 switcher or EMD SD-40-2 road switcher for its normal operation. The types of cars to be used may include open top hoppers or gondolas with 100 or 114 ton capacity. Car supply would originally be determined by UP. Initially, the average number of cars would be approximately 70 cars per train with plans of growing train sizes to meet market demands. Each car would be approximately 57 feet long. Therefore, the typical length of a train would be roughly 3,990 feet. Based on estimated rail shipments totaling 2 million tons, Alamo North expects to operate approximately 6 trains per week, including both inbound and outbound traffic, upon full development of the Alamo North rail market. The initial operating plan relating to the number of



employees is estimated to be approximately 4 on-site employees with an operating payroll of approximately \$150,000.

The proposed action would cross one dirt county road (FM 1539), which connects two county roads and runs by the main entrance of the quarry. However, Wise County may abandon FM 1539 to adjacent land owners in the near future. If any grade crossings are required, Alamo North would install appropriate grade crossing safety devices such as warnings and stop signs at all grade crossings. The average speeds of the trains would be between 5 and 10 mph, not to exceed 10 mph. Buffer zones would extend approximately 50 feet from the rail line and would consist of a combination of earthen berms, indigenous plants and other local vegetation and fences. UP crews would deliver empty trains to the facility. Alamo North crews would be responsible for operations within their property boundary such as placing cars for loading and preparing trains for departure. UP crews would depart from the facility and deliver the materials to their destination.

Maintenance activities would be conducted to maintain the facility in good condition. Tracks would be maintained by resurfacing and replacing the ties and the damaged rail as needed. Industry track, including switches, would be inspected on a monthly basis in compliance with Federal Railway Administration's Standards. The locomotives would be maintained by changing filters and by cleaning the external bodies with water. In addition, rail-testing equipment would be run over this track segment on a yearly basis to electronically check for defects in the rail. Based on these inspections, ties and defective rail would be replaced. The track alignment would also be maintained using a surface machine to maintain the grade and alignment within applicable requirements.

Weed control would be accomplished with typical vegetation cutting methods, such as hand held weed cutting devices and mowers.

### **3.4 Other Route Alternatives Considered**

During the planning phase of the project Alamo North considered three alternative routes to the proposed route, as shown on Figure 3-1. Alamo North also considered alternative means of transporting quarried materials to the UP line. A conveyor alternative was considered but rejected due to the economic cost of building and maintaining the several miles of belts, idlers, and idler tables.

The Section of Environmental Analysis (SEA) reviewed the proposal and all available information and determined that Alamo North's proposed route and the other possible alternative

routes would have similar environmental impacts. In Citizens Against Burlington v. Busey, 938 F.2d 190 (D.C. Cir. 1991), the court held that agencies have discretion under the National Environmental Policy Act to explore and evaluate a reasonable range of alternatives designed to meet the purpose and need of the applicant's proposal.

SEA determined that Alamo North's proposed route appeared to be the most viable option for the project. The other possible routes would be longer and would have no apparent environmental advantages over the proposed route. The proposed route would minimize interference with quarrying operations by following the northern boundary of the eastern parcel of land leased by MMM Southwest. Additionally, the proposed route would support the greatest access to Dvorken reserves, which is the area for the proposed new quarry, and it would place the track in close proximity to crushing operations. Therefore, SEA decided to grant Alamo North's request to limit detailed review in the Environmental Assessment (EA) to Alamo North's proposed route. (See Appendix F.)

Below is a description of each of the alternative routes initially considered by Alamo North and then preliminarily examined by SEA, before SEA decided to limit focused review in the EA to Alamo North's proposed route.

Alternative Route 1 would utilize the same initial proposed line (northernmost area of Dvorken property) with the exception that the line would turn south, southwest and follow the outermost eastern area of the current mining boundaries (Chico Stone tract) adjacent to the county road and then turn in a westerly direction for approximately 3,500 feet.

Alternative Route 2 would virtually split the Dvorken property (most of the eastern half of the proposed route) in half and would run for approximately 5,300 feet in a westerly direction at the southernmost end of the current mining area for approximately 3,500 feet.

Alternative Route 3 would place the line in an area outside of the Dvorken property located approximately 1,700 feet due north of the northernmost boundary of the Dvorken property. The line would run due west for approximately 10,000 feet.

Although these routes are possible, because of their longer distances, they would involve greater disturbance of natural areas and could potentially interfere with quarry operations. The alternative routes also present economic or physical obstacles that make the proposed route the most cost effective, and therefore, it provides the highest economic value.

### **3.5 The No-Build Alternative**

The “no-build” alternative would involve the continuation of sole reliance on trucks for transporting limestone aggregate. This alternative would economically prohibit the quarry expansion and would reduce the opportunity of capitalizing on the rail distribution network and attracting continued capital investment through the development of these growth opportunities.

### **3.6 Approvals and Permits Required for Construction and Operation**

Alamo North would require the following approvals and permits prior to the proposed rail line construction and operation.

<b>Agency</b>	<b>Action</b>
Surface Transportation Board	Authority to construct and operate proposed rail line
U.S. Environmental Protection Agency	General Stormwater Construction Permit
U.S. Army Corp of Engineers	Nationwide Permit for Stream Crossing (Linear Transportation Crossings)

## 4.0 DESCRIPTION OF AFFECTED ENVIRONMENT

This section describes the existing environment in the area that would be affected by the proposed action.

### 4.1 Socioeconomic Setting and Land Use

This section gives an overview of the social and economic setting, and land use characteristics of the local environment. Impacts of the proposed action are discussed in Section 5.1, "Socioeconomic and Land Use Impacts."

#### 4.1.1 Population

The project area is located in Wise County, Texas, approximately 50 miles northwest of Fort Worth. The 1990 and 2000 populations for the state, county, and nearby towns are presented in Table 4-1. The population of Wise County was 48,793 in 2000. Decatur and Bridgeport are the largest towns in Wise County, with 2000 populations of 5,201 and 4,309, respectively. Decatur is the county seat. Chico (within a mile) and Bridgeport (within 8 miles) are the towns closest to the proposed project. Between 1990 and 2000 Wise County experienced an average annual population growth rate of 4.1 percent, compared to the state average annual growth rate of 2.3 percent.

**Table 4-1. Current Population and Growth Rates**

Place	1990 Population <sup>1</sup>	2000 Population <sup>2</sup>	Average Annual Rate of Population Change
Alvord	865	1,007	1.6
Aurora	623	853	3.7
Boyd	1,041	1,099	0.6
Bridgeport	3,581	4,309	2.0
Chico	800	947	1.8
Decatur	4,252	5,201	2.2
Fairview	1,554	877	-4.4
Runaway Bay	700	1,104	5.8
Wise County	34,679	48,793	4.1
Texas	16,986,510	20,851,820	2.3

<sup>1</sup> 1990 Census of Population and Housing, STF1 <http://factfinder.census.gov/>.

<sup>2</sup> 2000 Census of Population and Housing, PL 94-171. <http://factfinder.census.gov/>.

Table 4-2 presents 2000 minority population characteristics for Wise County, Texas, and towns near the proposed project. About 14 percent of Wise County's 2000 population was minority, compared to a statewide average of 47.6 percent. The percent minority population in

census blocks near the proposed project site is comparable to the percent minority population for Chico and Bridgeport.

**Table 4-2. Minority Population Characteristics**

Place	Total Population <sup>1</sup>	Minority Population <sup>1</sup>	Percent Minority
Alvord	1,007	83	8.2
Aurora	853	68	8.0
Boyd	1,099	191	17.4
Bridgeport	4,309	1,375	31.9
Chico	947	84	8.9
Decatur	5,201	1,390	26.7
Fairview	877	96	10.9
Runaway Bay	1,104	31	2.8
Wise County	48,793	6,802	13.9
Texas	20,851,820	9,918,507	47.6

2000 Census of Population and Housing, PL 94-171. <http://factfinder.census.gov/>.  
 Minority population includes all Non-Whites and White-Hispanics.

Table 4-3 presents statistics for population living below poverty level for Wise County, Texas, and towns near the proposed project. Approximately 14 percent of Wise County's 1990 population lived below poverty level, compared to an average 18.1 percent for the State of Texas. The percent of population living below poverty level in census block groups near the proposed project site are comparable to the percent of population living below poverty level for Chico and Bridgeport. The median household income in Wise County was \$25,885 in 1990 compared to a median household income of \$27,016 across Texas. (U.S. Bureau of Commerce, 1990.)

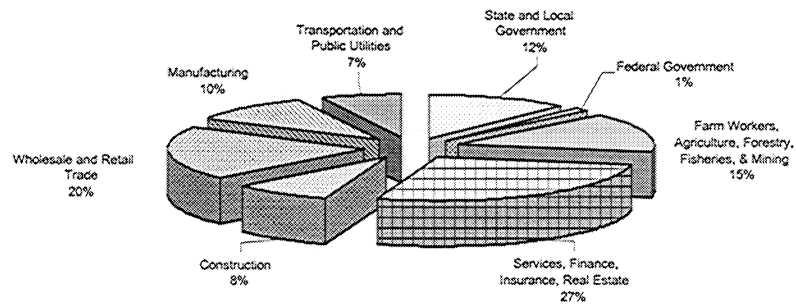
#### **4.1.2 Employment and Income**

Wise County is a rural economy supported by agriculture and mining. The retail trade and service centers primarily serve local populations. Approximately 20,300 Wise County residents were employed full-time or part-time in 1999 (Bureau of Economic Analysis (BEA), 1999). Figure 4-1 shows 1999 employment by major economic sectors in Wise County. Services, finance, insurance, and real estate industries were the largest economic sector, followed closely by wholesale and retail trade and agriculture.

**Table 4-3. Population Living Below Poverty Level**

Place	Population <sup>1</sup>	Persons Living Below Poverty Level <sup>1</sup>	Percent Living Below Poverty Level
Alvord	865	77	8.9
Aurora	596	71	11.9
Boyd	1,041	142	13.6
Bridgeport	3,135	569	18.2
Chico	783	133	17.0
Decatur	4,105	641	15.6
Fairview	1,554	52	3.4
Runaway Bay	713	31	4.4
Wise County	33,630	4,714	14.0
Texas	16,580,286	3,000,515	18.1

<sup>1</sup>1990 Census of Population and Housing, STF 3A. <http://venus.census.gov/cdrom/lookup>.  
The population listed in this table is the population for which poverty status was determined in the 1990 census.



Source: BEA, 1999.

**Figure 4-1. Wise County Employment by Economic Sector**

Based on personal earnings, the largest industries in 1999 were durable goods manufacturing, services, and retail trade. Of the industries that accounted for at least 5 percent of Wise County personal earnings in 1999, the fastest growing was construction, which increased by 23.8 percent from 1998 to 1999 (BEA, 1999).

## **4.2 Land Use**

As shown in Figure 4-2, the proposed rail line would be located in north central Texas in western Wise County near the town of Chico. Wise County is about 50 miles northwest of Fort Worth. Wise County's economy is based on agriculture, mineral extraction, and other industries stemming from the area's natural resources. There are nine stone quarries in Wise County, and numerous oil and gas wells. Decatur is the county seat and the main trading center. The county, comprising 922 square miles, is divided from north to south between the Eastern Grand Prairie and the Western Cross-Timbers physiographic regions of Texas. Natural resources include stone, clay, gas, and oil. Approximately 40 percent of the total area is quality farmland, and 60 percent is forest and grazing land. (Texas State Historical Association, 2001.)

The project area begins at the existing Union Pacific Railroad Company (UP) rail line near the Chico quarry, and extends approximately 2.25 miles to the north and west. The general location of the quarry is shown in Figure 4-2. The proposed alignment is shown in Figure 4-3. Appendices B and C present an aerial photograph of the site and ground level pictures of the right-of-way, respectively. All of the proposed rail line is on property leased by Martin Marietta Materials Southwest, Ltd (MMM Southwest), including the Dvorken tract on which MMM Southwest plans to develop a new quarry. (See aerial photograph in Appendix B.) Nearby land uses include:

- Cropland and pasture.
- Deciduous forest.
- Herbaceous rangeland.
- Mixed rangeland.
- Mixed urban or built-up land.
- Nonforested wetlands.
- Reservoirs.
- Residential.
- Shrub and brush rangeland.
- Strip mines, quarries, and gravel pits.
- Transitional areas.

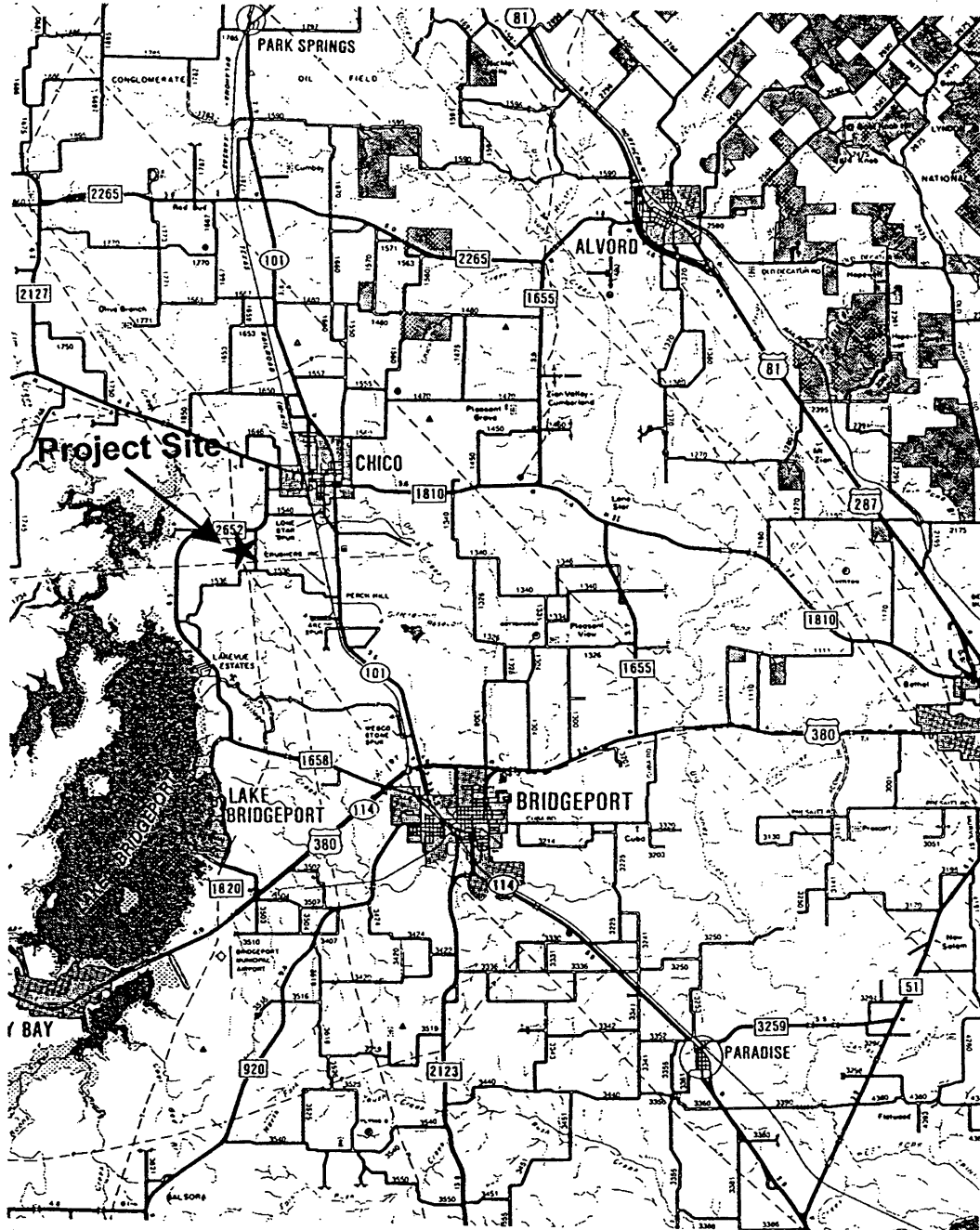
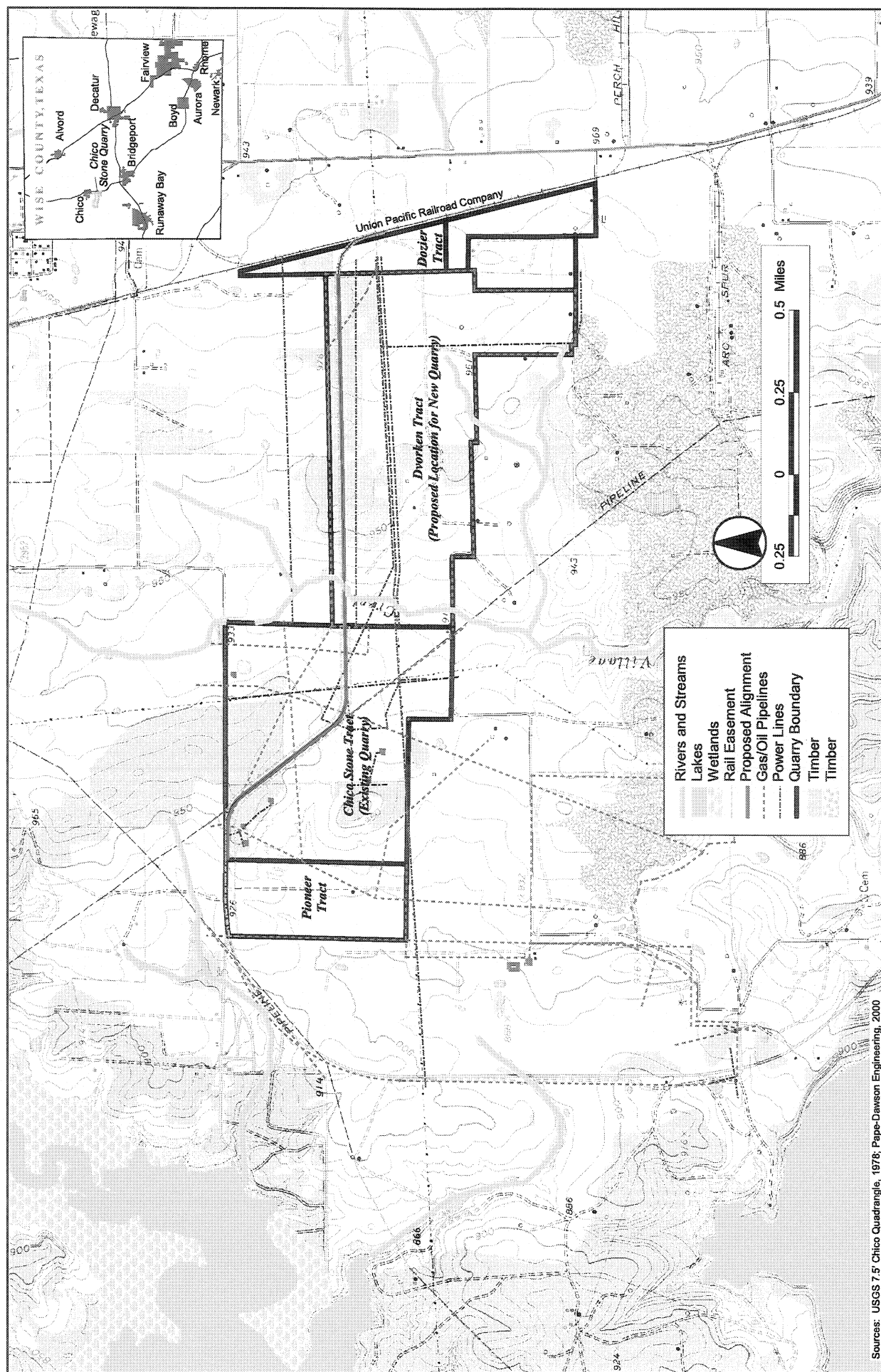


Figure 4-2. General Location Map







### Figure 4-3 Proposed Rail Alignment



Land uses in the project area are classified as strip mines, quarries, and gravel pits; herbaceous rangeland, and cropland and pasture. (U.S. Geological Survey (USGS), 2001.) The proposed rail line crosses gas and oil pipelines at nine locations, and shares a right-of-way with gas pipelines for about 0.75 miles.

The upper reaches of Lake Bridgeport are located to the west and southwest of the project site, separated by approximately 0.7 miles at the nearest location. A majority of the project site drains into Village Creek, which drains into the West Fork of the Trinity River. The topography is gently sloping, with a maximum vertical relief of approximately 50 feet along the 2.25-mile route.

#### **4.3 Physical Setting (Physiography)**

Wise County has an area of about 922 square miles, or 590,080 acres. The county slopes mainly to the east and southeast. It is entirely within the Trinity River drainage system and it is drained by the West Fork of the Trinity River and by Denton Creek. The county is divided from north to south between the Eastern Grand Prairie and the Western Cross-Timbers regions of Texas. The topography of the eastern section consists of gently rolling hills with sandy loam topsoils and brick clay subsoils. Central Wise County has a combination of flat and undulating terrain; its waxy, light-colored surface soil covers deep layers of red clay. The western section is primarily hilly, with alluvial loam and sandy top layers over clay and limestone sublayers. Natural resources include stone, clay, gas, and oil. Vegetation ranges from natural and improved grasses to post and live oak, cottonwood, and mesquite trees. Approximately 40 percent of the total area is farmland, and 60 percent is forest and grazing land. The average elevation of Wise County is 800 feet above sea level. Elevations at the site of the construction are between 920 and 970 feet above mean sea level (MSL) - well above the 100-year floodplain and the 840 feet MSL level of Lake Bridgeport, except for the crossing at Village Creek, which is within the 100-year floodplain.

Native soils in the western portion of the proposed alignment belong to the Truce-Cona soil unit. These soils are deep, loamy, well-drained soils underlaid by interbedded shaly clay or sandstone, and are too stony and dry for use as pasture or cropland.

The native soils in the central part of the alignment belong to the Palopinto-Hensley-Lindy soil unit, with very shallow to moderately deep, loamy, well-drained soils underlaid by limestone. These soils are poorly suited to urban and recreational uses.

The eastern portion of the alignment consists of native soils that belong to the Windthorst-Chaney-Selden soil unit. These soils are deep, loamy and sandy, and moderately well drained, underlaid by stratified loamy and clayey material on uplands. These soils are well suited to most urban and recreational uses.

With modern industrial development of this area for mining activities, the surface soil make up has changed dramatically. The area surrounding the proposed Alamo North rail line is classified as “undorthents” or manmade. This classification refers to the addition or removal of more than a foot of native soil. Current aerial photographs of the site show little vegetation remaining in the area, limited to the northwest corner of the alignment. Current development plans for the area involve the expansion of the quarry and therefore, the disturbance of additional native soil.

#### **4.4 Water Resources**

Water resources in the area of the proposed action include surface waters, wetlands, and groundwater. These are discussed briefly below.

##### **4.4.1 Surface Waters**

The project area is located within the Upper West Fork of the Trinity River watershed (USGS Cataloging Unit 12030101). The West Fork of the Trinity River drains two-thirds of the county. Two lakes, Lake Bridgeport and Eagle Mountain Lake, and numerous creeks and tributaries provide an abundant water supply and recreational facilities.

The project area is located just downstream of Lake Bridgeport. The proposed new rail construction would cross the intermittent stream: Village Creek, a 63-mile tributary of the West Fork Trinity River. During a site visit conducted on June 7, 2001, this stream appeared to be a dry channel with no evidence of long-term or perennial flow. The Village Creek watershed is heavily forested, and silviculture and oil and gas exploration are the dominant industries. Past data analyses have demonstrated a concern for fecal coliform bacteria. The Texas Natural Resource Conservation Commission plans additional monitoring activity in this segment. The western portion of the proposed alignment is located within 0.12 miles of Lake Bridgeport in a southwestern direction. Another stream, Dry Creek, is located within 0.10 miles of the proposed alignment, although the alignment would not cross over this stream.

The West Fork Trinity River below Lake Bridgeport is a 36-mile segment identified as Segment 0810. This segment runs from a point 0.36 miles downstream of the confluence of Oates Branch in Wise County to Bridgeport Dam in Wise County. The water quality in Segment

0810 tends to have bacteria levels that sometimes exceed the criterion established to assure the safety of contact recreation. Municipal wastewater discharges and unidentified non-point sources contribute to this condition. The designated uses of this segment include contact recreation, high aquatic life and public water supply, although contact recreation is not supported. The non-point source impacts on this segment tend to be minor, whereas the point source impacts tend to be moderate.

The proposed alignment is not located within the Federal Emergency Management Agency 100-year floodplain and floodway designations, except for the crossing at Village Creek.

#### **4.4.2 Wetlands**

The U.S. Army Corps of Engineers (COE) has indicated that the proposed alignment is not within a jurisdictional wetland as defined under Section 404 of the Clean Water Act. (See Appendix A.) A Section 404 wetland is one that meets COE's definition as "an area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, a prevalence of vegetation typically adapted for life in saturated soil conditions." According to the National Wetlands Inventory (NWI) maps, which were referenced in the preparation of this document, there is a jurisdictional wetland within one mile directly west of the alignment and within the floodplain of Lake Bridgeport. This wetland is generally marked in Figure 4.3: USGS Map with proposed route. However, the proposed alignment would not traverse the wetland area shown on the USGS map.

On June 7, 2001, SEA conducted a field reconnaissance of the area and concluded that there are no wetlands in the project area. The area is dry uplands and it is crossed by one small intermittent stream, Village Creek. After walking the right-of-way and the stream, SEA found no areas that indicate the possibility of a wetland. While there were several dry ponds located on the property, there was an absence of hydrophilic plants that would indicate at least some water retention during the wet periods of the year. Most of these areas had mesquite (*Prosopis juliflora*) as the dominant vegetation, which grows in dry conditions. In addition, a review of the NWI maps showed no wetlands in the project area.

#### **4.4.3 Groundwater**

The aquifer in the area includes the Trinity aquifer, which is part of the Edwards-Trinity aquifer system. This system consists of three complex interrelated aquifers, the Edwards-Trinity, the Edwards, and the Trinity aquifers, which are hydraulically connected in some places. The Trinity aquifer consists of the Trinity Stage and the Coahuilan Series, which crops out on its updip edge from the hill country of south central Texas into southeastern Oklahoma.

Most of the water from this aquifer system is pumped for industrial, mining, and thermoelectric-power uses, although some water is pumped for commercial and domestic uses. The Dallas-Fort Worth area withdraws the largest amount of water from the aquifer system.

The Trinity aquifer underlies an area of about 41,000 square miles that extends from south central Texas to southeastern Oklahoma. The aquifer is in the form of a narrow band which consists of interbedded sandstone, sand, limestone, and shale of Cretaceous age, approximately 550 miles long. The aquifer provides the total or partial water needs for many cities, towns, industries and farms north of Austin, but is less important in other parts of the state.

In the area of the proposed project, the Paluxy and Twin Mountains formations of the Trinity aquifer coalesce to form an undifferentiated unit mostly of sand and sandstone referred to as the “Antlers Formation.” The width of the aquifer ranges from a few feet in the outcrop areas to more than 1,000 feet in down-dip areas. The width of the aquifer within the proposed project site is about 170 feet wide.

Recharge of the aquifer is generally from precipitation and from seepage from streams and ponds. Over time, water levels in the aquifer have declined hundreds of feet in east central and northeast Texas. Water level declines have been especially large in Tarrant County, just south of Wise County where the project site is located. In Wise County, water from the aquifer is used (mostly for irrigation in rural areas) but not as intensely as in the neighboring counties.

In general, the Trinity aquifer has been intensely developed in northeast Texas. Groundwater has been favored over surface water sources to supply the needs of towns because of the great expense of reservoir construction, transmission lines, and treatment facilities associated with the latter. In addition, groundwater is used for irrigation and as the main water supply source in most rural areas. Over the last few years, the trend has been away from ground water use and toward surface water use.

## **4.5 Biological Resources**

### **4.5.1 Flora**

The project area is a mix of fallow fields, densely wooded uplands and pasture. From the existing rail line, west to the MMM Southwest property is a fallow field overgrown with herbaceous plants/weeds. Where the MMM Southwest property begins the right-of-way enters a densely wooded area. This area has secondary growth trees with heavy ground cover. Primary species include post oak (*Quercus stellata*), live oak (*Q. virginiana*), elm (*Ulmus americana*),

cottonwood (*Populus deltoides*) and mesquite (*Prosopis juliflora*). Ground cover is a mix of young trees, shrub species and herbaceous growth. Cattle grazing has little effect on this area.

The right-of-way proceeds west after leaving the wooded section and runs through pasture. This pasture is dissected by Village Creek, an intermittent stream, and is rapidly becoming overgrown with mesquite. Ground cover is a mix of grasses, herbaceous species and shrubs. The right-of-way then enters the Chico quarry where vegetation is almost nonexistent.

The soils in the project area are a thin (<4") horizon of a light loam underlaid by red clay. Soils have low nutrient value, likely due to low moisture holding capabilities. The low nutrient value in soils, the amount of rainfall in the area, and the usage of land, limit the growth of vegetation in the area.

#### **4.5.2 Fauna**

As stated in the section on flora, there are three distinct vegetation types in the project area (fallow fields, densely wooded uplands, and pasture). Although there is some overlap, the fauna utilizing these areas differ as well. Several conclusions can be drawn from the site visit. The present use of the land as pasture and the amount of industrial activities in the surrounding areas have a very limiting effect on the wildlife. The fallow field on the eastern end of the project area provides habitat for rodents, songbirds, reptiles and small mammals such as rabbits. This in turn provides prey for larger mammal predators and raptors.

The wooded area suggests habitat for rodent species, deer and medium sized mammals, and birds and reptiles. This habitat includes nesting, feeding, hunting and hiding areas. The dense growth should have a limiting effect on many of the larger species, with smaller species expected in higher numbers.

The pasture on the western side of the property could provide habitat for many of the same species found in the first two areas. Due to the open terrain, the rodent population should be higher, and the area may be used by raptors for hunting. Many species that use the woods for cover could use this area for feeding, hunting, and other activities.

A general overview of the area is that while there is potential for good wildlife habitat, past and present activities have limited habitat in the surrounding areas and have had an effect on the fauna in the project area.



### **4.5.3 Endangered or Threatened Species**

Data received from the Texas Parks and Wildlife Department (TPWD) indicate that 10 species of concern have been reported in Wise County. The U.S. Fish and Wildlife Service (FWS) lists six of these species as either threatened or endangered. The State of Texas lists an additional two of these species as either threatened or endangered. Threatened and endangered species and species of concern that are listed by the FWS and TPWD are provided in Table 4-4.

A review of Federally-listed species of concern indicates that the peregrine falcon, whooping crane, Eskimo curlew, black-capped vireo, and interior least tern are known to occur in Wise County. All of the species, except the black-capped vireo and the interior least tern, are migratory within the area and would only occur in the Wise County area as transients. Nesting requirements for the black-capped vireo are highly specific to limestone drainages and dense thickets that are not present in the project area. The interior least tern typically is found on sand bars with a gravel substrate along rivers of north central Texas, and would be unlikely to be present within the project area. Although it is highly unlikely that nesting habitat for the black-capped vireo is present in the project area, SEA is recommending a mitigation condition requiring Alamo North to notify FWS if suitable vireo habitat is found during construction.

The state species of concern would probably be absent from the project area as well. The timber/canebrake rattlesnake and the Texas garter snake are indigenous to wet areas with relatively dense vegetation. Although some regions of the project area might be favorable for such species, the limited extent of such habitat would largely preclude the presence of either species. The Texas horned lizard requires relatively open areas with loose sandy soils that are not present in the project area. The Comanche Peak prairie-clover is found on limestone summits and peaks at elevations above those of the project area; therefore, it is unlikely that the species would be present within the project area.

## **4.6 Transportation**

In the 1880s and 1890s the first railroads were built through Wise County: the Fort Worth and Denver City, which passed through Decatur, and the Rock Island (now UP), which crossed the western section of the county through Bridgeport. The railroads stimulated the economy and made the production of coal in Bridgeport and of cotton, wheat, and livestock production in eastern Wise County more profitable.

**Table 4-4. Federal and State Listed Species of Concern**

Species of Concern	Status (Listing)		Habitat
	Federal	State	
Avian Species			
American Peregrine Falcon ( <i>Falco peregrinus anatum</i> )	LE	E	Potential migrant; nests in west Texas.
Arctic Peregrine Falcon ( <i>Falco peregrinus tundrius</i> ) <sup>(1)</sup>	E/SA	T	Potential migrant; nests in west Texas.
Whooping Crane ( <i>Grus americana</i> )	LE	E	Winters in Aransas National Wildlife Refuge and may be found in open marshes and fields.
Eskimo Curlew ( <i>Numenius borealis</i> )	LE	E	Nonbreeding; habitat includes grasslands, pastures, and plowed fields; infrequently, in marshes and mudflats.
Black-capped Vireo ( <i>Vireo atricapillus</i> )	LE	E	Found in brushy drainages on the Edwards Plateau of central Texas. Nests close to the ground in shrubs and thickets.
Interior Least Tern ( <i>Sterna antillarum</i> ) <sup>(2)</sup>	LE	E	Inland river sandbars for nesting; shallow water for foraging.
Reptile Species			
Timber/Canebrake Rattlesnake ( <i>Crotalus horridus</i> )	NL	T	Swamps, floodplains, upland pine and deciduous woodlands, riparian zones, abandoned farmland; prefers dense ground cover.
Texas Horned Lizard ( <i>Phrynosoma cornutum</i> )	NL	T	Open arid or semi-arid regions with sparse vegetation.
Texas Garter Snake ( <i>Thamnophis sirtalis annectens</i> )	NL	NL	Prefers wet areas, such as marshes or flooded pastures.
Vascular Plant Species			
Comanche Peak Prairie-clover ( <i>Dalea reverchonii</i> )	NL	NL	Found on limestone summits/peaks.

E/SA Federally-listed as Endangered due to similarity of appearance

LE, E Federally-listed as Endangered, State-listed as Endangered

LT, T Federally-listed as Threatened, State-listed as Threatened

NL Not Listed

<sup>(1)</sup>Arctic Peregrine Falcon - listed as endangered due to similarity of appearance

<sup>(2)</sup>Interior Least Tern - In Texas the species receives full protection, except within 50 miles of the Gulf Coast.

Source: Correll and Johnston, 1970

Garrett and Barker, 1987

Lowe, et al., 1991

Pantex, 1995

Rappole and Blacklock, 1994

Tennant, 1984

Texas Parks and Wildlife Department, 2001

U.S. Fish and Wildlife Service, 1995, 1998

Currently, the area is served by UP, U.S. Highway 81, State Highways 101 and 1810, and FM 2952. The Dallas-Fort Worth International Airport also serves this area.

The Texas Department of Transportation (TxDOT) has indicated that the proposed action and its alternatives would not cross any state maintained roadways. In addition, TxDOT has no plans for a new facility within the areas designated. The proposed action would cross one dirt county road (FM 1539), which connects two county roads and runs by the main entrance of the quarry. However, Wise County may abandon FM 1539 to adjacent land owners in the near future. MMM Southwest has constructed a private road that lies several hundred feet from and runs parallel to the right-of-way of the proposed rail line, providing an alternate means of access from State Highway 101 to the Chico quarry. MMM Southwest plans to open this road in the near future. Traffic on these roads is primarily to and from the quarry. MMM Southwest estimates that no more than 2-3 cars a day, not on quarry business, would use these roads. (See Figure 3-1.)

The proposed alignment would cross one major gasoline pipeline (Equilon Oil Pipeline). In addition, the alignment crosses several smaller pipelines (Western Oil Pipeline, Permian Oil Pipeline) but most are thought to be inactive. The project's potential effects on these crossings, both short term and long term, are discussed in Chapter 5.

Currently, trucks delivering materials from the quarry use FM 2952 or State Highway 101 to an unnamed public road that borders the south end of the Dvorken Tract and ties into FM 1539. (See Figure 3-1.)

#### **4.7 Climate and Air Quality**

In winter, the average temperature in Wise County is 45°F, and the average daily minimum temperature is 31°F. In summer, the average temperature is 83°F and the average daily maximum temperature is 97°F. The total annual precipitation is 28.86 inches. Of this, 17 inches, or 60 percent, usually fall in April through September. The average seasonal snowfall is 4 inches. On the average, only one day per year has at least 1 inch of snow on the ground. The average relative humidity in midafternoon is 55 percent. Humidity is higher at night, and the average at dawn is 80 percent. The sun shines 75 percent of the time possible in summer and 60 percent in winter. The prevailing wind is from the south. Average wind speed is highest, 13 miles per hour, in spring. Tornadoes and thunderstorms occur occasionally. These storms are local and of short duration, and the pattern of damage is variable and spotty.

Wise County attains all National Ambient Air Quality Standards, although the neighboring counties of Collin, Dallas, Denton and Tarrant are serious non-attainment areas for ozone.

#### **4.8 Noise**

Train traffic and quarry operations are the primary sources of noise in the area along the route of the proposed action. Because of its industrial character and the absence of noise receptors, noise is not an issue for the area of the proposed rail extension.

#### **4.9 Cultural Resources**

On June 7, 2001, SEA conducted a field visit of the project area, in accordance with the Texas Historic Commission's (THC) protocol for pedestrian surveys, and walked along the right-of-way to determine if prehistoric or historic sites would be affected by the proposed work. In addition, SEA created and examined several subsurface test pits to determine if buried sites were present. The subject property is an old homestead with several barns, a house and two oil wells present. The house is out of the project area, is in very poor condition and appears to have been built in the 1930's. The right-of-way is located to the north of all structures/features associated with the property. SEA explored areas that offered good ground visibility by foot to determine if artifacts were present on the surface. SEA dug auger holes to the subsoil in areas that offered poor visibility and checked the removed fill for material. The soils on the site are a thin layer of loam (<4") with a thick red clay layer underneath. SEA found no artifacts and, based on the result of the field visit, believes that the probability of buried sites is unlikely.

In conclusion, the right-of-way does not contain any standing structures nor were any archaeological sites found along the area of the proposed project. SEA believes that this project would not affect any cultural resources. A letter from the THC stating that the proposed project does not impact any historic properties and that the project may proceed is attached in Appendix E.

#### **4.10 Recreation**

Lake Bridgeport and Eagle Mountain Lake, and numerous creeks and tributaries provide abundant recreational facilities in the vicinity of the proposed project. However, the right-of-way of the proposed rail line crosses no parks or recreational water facilities, and the proposed project should not affect any recreational areas.



## **5.0 ENVIRONMENTAL IMPACTS OF CONSTRUCTION AND OPERATION OF THE PROPOSED RAIL LINE**

This chapter addresses environmental impacts of constructing and operating over the proposed new rail line. The issues raised by the various respondents to the consultation letter process are discussed in the appropriate sections of this Chapter. Chapter 6 presents the Section of Environmental Analysis' (SEA) recommended mitigation.

### **5.1 Socioeconomic and Land Use Impacts**

#### **5.1.1 Socioeconomics**

Martin Marietta Materials Southwest, Ltd. (MMM Southwest) expects that, on average, approximately 4-6 people would be employed during construction of the proposed rail line. This could increase to as many as 10-12 people at the peak of activity. The average time of employment would be four months to six months, at an average base salary of \$15 to \$20 per hour. To the extent that the wages these employees would receive are spent within the local area, the construction phase of the proposed action would positively affect the local economy. However, this would represent a minimal effect due to the relatively limited number of construction employees and the limited duration of employment. Once the rail line is in operation, net change in employment and other effects upon the local economy would be too small to measure. The number of current truck drivers displaced by the addition of the rail line would be offset by the number of truck drivers that would need to be employed to transport the combined output of the existing and new quarries. Furthermore, given that there is a shortage of truck drivers in the Chico market, drivers would not be displaced as a result of this action as they would most likely find employment from one of the other quarries in the area. In addition, locally there would be an increase of at least 4 new jobs, which would be required for the operation and maintenance of the proposed rail operations.

#### **5.1.2 Land Use**

The potential for land use impacts from construction of a new rail line generally arises from acquisition of land for the proposed right-of-way and associated uses, as well as from effects on property adjacent to the right-of-way due to such things as restriction of access. The particular circumstances of each case determine the extent to which such impacts actually occur.

Land use along a majority of the proposed new rail construction is existing stone quarry or mixed cropland and pasture land with some timber. There are no churches, schools, or other public gathering places within a half-mile of the proposed new rail construction. There is a high

school in the town of Chico, but it is located a little over 0.5 miles away from the proposed rail line. The western end of the proposed new rail construction is adjacent to FM 2952 for about three-tenths of a mile. There are nearby residences across the road, but no residences within the right-of-way. According to the site visit and review of aerial photographs, there are six residences (four mobile homes and two brick homes) along FM 2952, within 500 feet of the right-of-way. Although these residences would be exposed to short-term effects of the proposed new rail line construction, and long-term effects due to activities along the rail line during operations, they would also experience reduced truck traffic after the proposed new rail line is complete.

The right-of-way for the proposed new rail line crosses portions of the Chico Stone Tract, Dvorken Tract and Dozier Tract. The line would primarily traverse land leased by MMM Southwest, including the Dvorken Tract, on which MMM Southwest plans to develop a new quarry. Another large stone-producing company owns the Dozier Tract. The entire right-of-way for the proposed new rail construction would be within an existing railroad easement.

MMM Southwest states that it has attempted to minimize instances of property severance by the proposed rail line. Where severance is unavoidable, Alamo North Texas Railroad Corporation (Alamo North) would negotiate with the landowner and provide access to the severed property.

Vegetation and construction debris would be piled and burned where permitted. Burial and hauling to landfills are other options that could be implemented if appropriate. MMM Southwest indicates that it has no information at this time concerning staging areas or borrow/spoil sites. Hauling of materials would utilize FM 2952, via the Chico Stone Tract access road.

MMM Southwest states that it knows of no hazardous waste sites within the proposed new rail right-of-way.

### **5.1.3 Environmental Justice**

The environmental justice assessment conducted for the proposed new rail construction is described below.

#### **Background**

Presidential Executive Order No. 12898, "Federal Actions to Address Environmental Justice in Minority and Low-Income Populations" directs individual Federal agencies to develop

approaches that address environmental justice concerns in their programs, policies, and procedures. Because the Surface Transportation Board (Board) is an independent regulatory agency, and thus is not decisionally part of the executive branch of the Federal government, the Board is not legally bound by executive orders. Nevertheless, the Board makes every effort to comply with executive orders. SEA determined that conducting an environmental justice analysis for Alamo North's proposed project was appropriate for the following reasons:

- The President requested agencies to comply with Executive Order 12898, particularly during the National Environmental Policy Act (NEPA) process.
- The U.S. Department of Transportation (U.S. DOT) order to address environmental justice concerns of minority populations and low-income populations, the Council on Environmental Quality (CEQ) guidance on environmental justice, and the U.S. Environmental Protection Agency (EPA) guidance on evaluating environmental justice in the NEPA process all emphasize addressing environmental justice concerns during the NEPA process (U.S. DOT 1997, CEQ 1997, EPA 1998).
- The Board is responsible for ensuring that any action which it authorizes is consistent with the public interest.
- Under NEPA, the Board is required to examine direct, indirect, and cumulative environmental impacts of actions requiring Board authorization.

### **Approach**

SEA conducted an environmental justice analysis to determine the presence or absence of a community of concern (COC) surrounding the proposed rail line. If a COC is present, the objective is to determine the presence or absence of disproportionately high and adverse human health or environmental effects on the citizens of the COC. Based on established criteria, a COC is defined as any occurrence within the area potentially affected by the proposed new rail construction where one or more of the following criteria is met:

- At least 50 percent of the population in a census reporting unit (block or block group) is minority.
- At least 50 percent of the population in a census reporting unit is low-income.
- The percent minority in the census reporting unit is more than ten percentage points higher than the percent minority for the entire county in which the census reporting unit is located.



- The percent low income in the census reporting unit is more than ten percentage points higher than the percent low income for the entire county in which the census reporting unit is located.

## Analysis

SEA conducted an environmental justice analysis on block groups within Wise County that may be affected by construction and operation of the proposed new rail line. The analysis was based on information available from the U.S. Census Bureau from the 1990 and 2000 *Census of Population and Housing*. Table 5-1 shows the percent minority and percent low-income for all block groups having potentially affected persons, and includes comparison statistics for Wise County. Note that this analysis was conducted using block groups instead of blocks because the low-income data are not reported at the block level. There were two block census groups (as reported in Table 5-1), and approximately four blocks near the project area.

**Table 5-1. Minority and Low-Income Status of Block Groups Potentially Affected by Proposed New Rail Construction**

Area	Percent Minority <sup>a</sup>	Percent Low-Income <sup>b</sup>	Minority COC?	Low-Income COC?
Tract 150401, Block Group 2	8.80	16.40	N	N
Tract 150401, Block Group 4	7.93	13.23	N	N
Wise County	13.9	14.0		

<sup>a</sup> Percent Minority calculated from block group data provided in 2000 Census of Population and Housing.

<sup>b</sup> Percent Low-Income calculated from block group data provided in 1990 Census of population and Housing (percent of population living below poverty level).

SEA determined that no environmental justice COC exists for the proposed new rail construction, since the percent minority and percent low income characteristics of the two census block groups having populations potentially affected by the proposed new rail construction:

- Are not greater than 50 percent.
- Are not more than ten percentage points higher than the averages for Wise County.

In summary, the project area does not meet environmental justice COC criteria and therefore the proposed new rail construction does not have the potential to cause disproportionately high and adverse human health or environmental effects on environmental justice communities in the vicinity of the proposed action.

## **5.2 Water Resource Impacts**

### **Construction**

The actual process of constructing a rail line could affect a surface water drainageway in the following ways:

- Soil and debris could be deposited or wash into the stream while rail construction activities are taking place.
- Interference with surface drainage could occur if placement of fill material were to block the surface drainage.

Surface water resources that would be crossed by the proposed rail line would be the most susceptible to construction impacts. The only stream being crossed by the proposed rail line (Village Creek) flows intermittently at the proposed crossing point and is dry most of the time. The proposed construction would most likely involve the use of culverts at this crossing with a very minimal amount of fill. Based on the proposed construction activities, no in-stream construction activities are expected in this stream. The proposed new rail construction would not impede existing surface drainage. With the exception of the crossing of Village Creek, most of the proposed alignment is located outside the 100-year floodplain. (See Federal Emergency Management Agency flood map in Appendix D.) Given that this project would disturb more than 5 acres of soil, a general construction permit will be prepared, including a stormwater pollution plan to mitigate stormwater runoff impacts.

### **Operation**

An accident during train operations over the proposed line could result in a spill of fuel into Village Creek. However, the likelihood of a train accident to occur over this particular stream is thought to be extremely unlikely, due to the projected low traffic level on the line and the planned maintenance program for the rail line. Diesel fuel for the locomotives, which is the only potential contaminant, would be present in limited quantities. In addition, the risk of a train-related spill is comparable to the risk of spills from trucks.

All engine and oil cleaning or change outs would be performed with environmentally friendly solvents and/or absorbing pads or other containment materials to ensure no contact with the ground. In addition, MMM Southwest intends to designate a specific contained area for conducting maintenance activities. Therefore, no environmental impacts are expected from these activities. The tracks would be repaired and resurfaced via manual resurfacing and switch cleaning methods and therefore, no impacts are expected from these operations.

Since vegetation control is expected to be performed manually via typical vegetation cutting methods, no environmental impacts are expected from this activity. No toxic materials, such as herbicides, would be used for this purpose.

There are no wetlands in the project area and the proposed project would not have any effect on wetlands in the general area. However, the one intermittent stream crossing would be built in a manner that would allow water flow to continue in the channel as stopping the small amount of flow could disrupt water to any wetlands downstream or cause potential flooding problems. (See Mitigation Measures in Chapter 6).

### **5.3 Biological Resource Impacts**

The proposed project would destroy the vegetation along the right-of-way. However, this vegetation is of a low quality for wildlife habitat, is common in the general area and easily replaced by secession. The building of a rail line, while destroying some vegetation, would also create open areas that may enhance the remaining vegetation.

The proposed project would destroy some marginal wildlife habitat. While the quality is poor, there is ample habitat of the same quality in the area that would not be affected by the rail line. Any species displaced by the rail would be able to move to such habitat in the general area.

Rare, and threatened or endangered species of concern are not known to inhabit this area. The region is highly disturbed with poor quality habitat. Most listed species are transients through the county. The others have very habitat specific requirements, which are not found in the project area. Thus, it is not believed that the proposed work would have any effect on listed species. However, the U.S. Fish and Wildlife Service has submitted comments suggesting mitigation to prevent impacts to the black-capped vireo. SEA has incorporated these comments into its recommended mitigation.

### **5.4 Transportation Impacts**

Construction and operation of the proposed rail line could affect transportation in the following ways:

- Construction of rail line could affect local transportation infrastructure.
- Operations over the proposed rail line could cause delays of vehicular traffic at grade crossings (there is only one grade crossing of a dirt road for this project).

- Operations of the proposed rail line could cause train-vehicular accidents at grade crossings.
- Operations over the proposed rail line could cause train derailments.
- There could be a reduction in roadway traffic as a result of the proposed action.

The proposed new rail line would not block any existing public roads. The only road crossed by the line is FM 1539 (a dirt road), which Wise County may abandon to adjacent land owners in the near future. Appropriate safety devices such as grade crossing warnings and stop signs would be implemented on FM 1539 if the road is not closed. The Texas Department of Transportation has indicated that the proposed line would not interfere with any planned road activities for that area.

At the present time, construction of the proposed rail line is expected to cross several small pipelines and one major gasoline pipeline (Equilon Oil Pipeline). Consultations with the Texas Office of Pipeline Safety indicated that the owners of the pipelines are responsible for ensuring the safety of the pipeline/rail crossings. Alamo North has the responsibility to work with the owners of the pipeline easements to make appropriate modifications to the design of the rail line, pipelines, or both in order to maintain pipeline integrity. Alamo North states that it would work with the pipeline companies to determine if there is any specific work that needs to be accomplished to protect the pipelines. Unless further analysis indicates otherwise, the pipelines would be protected with casing and venting.

There would be a maximum of 6 trains per week upon full development of MMM Southwest's rail market. A typical train would consist of 70 cars and one locomotive. Train operating average speed is expected to be between 5 and 10 mph, not to exceed 10 mph. Based on the above, vehicular accident or delay impacts would be minimized.

Any instance of train operation over a rail line involves at least a limited potential for derailment. However, track safety inspections would be conducted according to the Federal Railroad Administration standards contained in 49 CFR Part 213. The inspection program should detect any potential problems with the physical condition of the line at an early stage, minimizing derailment potential.

## **5.5 Air Quality Impacts**

### **Construction**

MMM Southwest states that fugitive dust control would be addressed in its construction specifications, which would require each contractor to use water trucks or other dust control measures. In addition, MMM Southwest will implement safe guidelines for burning construction debris from the site and will comply with all applicable requirements.

### **Operation**

Rail operations can affect air quality through emissions of air pollutants from locomotive diesel fuel combustion. The Board typically applies a threshold level of rail traffic increase for determining whether to quantify the air pollution, which would be generated by rail traffic over a new rail line, proposed for construction. This threshold is described at 49 CFR 1105.7(e)(5). According to the Board's guidelines, if the line proposed for construction is not located either in a Class I or a nonattainment area, pollutant emissions from rail traffic would be quantified only if the proposed action would add eight or more trains per day to the line to be constructed.

The project site is not in a Class I area. Wise County is in attainment for National Ambient Air Quality Standards criteria air pollutants. Substantially fewer than eight train movements per day are expected to be added to the proposed line (about 6 movements per week are expected). Because of this, expected air pollutant emissions from rail operations over the proposed line have not been quantified. However, due to the proposed amount of rail traffic, locomotive emissions would have minimal impact on air quality.

## **5.6 Noise Impacts**

### **Construction**

Noise levels in the area would rise during construction of the proposed rail line. Vehicles and machinery used for land clearing, roadbed construction, and bridge construction (if any) would generate temporary increases in noise levels. However, construction noise emissions would be of short duration.

### **Operation**

The Board applies a threshold level of rail traffic increase for determining, whether to quantify noise, which would be generated by rail traffic over a new rail line, proposed for construction. This threshold is described at 49 CFR 1105.7(e)(6). If the proposed action would add eight or more trains per day to the line to be constructed, noise to be generated by operations

over the line must be quantified and sensitive receptors may have to be identified. As projected train operations over the proposed line fall substantially short of this threshold, SEA has not quantified the potential increase in noise levels due to such operations. However, it can be said that the potential increase in noise would be fairly minimal due to the low traffic level, and that the addition of the train traffic and quarry operations over the high noise background levels would have minimal impacts. Also, the number of noise receptors would be relatively few, since there are only six residences along FM 2652 within 500 ft of the line that might be affected by the increase of noise in the area. The noise levels that would be experienced by these receptors from the operation of the proposed action would not be a big increase over the existing noise levels generated by the current Union Pacific Railroad Company traffic. Noise levels at each of the six residences have been calculated based on the specific distance from the home to the line to range from 60 to 67 dBA.

### **5.7 Cultural Resources Impacts**

Chapter 4, Section 4.9 describes the cultural resource survey SEA conducted for the proposed action. SEA identified no sites on or eligible for listing in the National Register of Historic Places along the right-of-way for the proposed new rail construction. Based on the results of SEA's archeological survey, discussed in more detail in Section 4.9, SEA believes the likelihood of buried sites is very low. The only structure within several hundred yards is a dilapidated farmhouse that appears to have no historic value and is not located within the area of impact. The Texas Historic Commission has submitted comments stating that no historic sites would be affected by the proposed action. (See Appendix A.)

### **5.8 Recreational Resources Impacts**

There are no public recreation sites in the project area. The proposed new rail construction and operation would have no recreational impacts.

### **5.9 Safety and Indirect and Health Impacts**

No negative indirect impacts of any type or health and safety impacts would result from the proposed action. In fact, the proposed rail line would have positive indirect effects on safety. The reduction in truck traffic would decrease the potential for truck accidents.

### **5.10 Cumulative Impacts**

Cumulative environmental impacts result when the effects of an action on a particular resource, ecosystem, or human community are added to or interact with other effects of a particular place and within a particular time. SEA identified no planned construction of other

projects that would be impacted by the proposed action. According to MMM Southwest, its plans to build the new quarry are unrelated to construction of the proposed rail line.

## **6.0 SECTION OF ENVIRONMENTAL ANALYSIS RECOMMENDATIONS FOR MITIGATION**

Based on the Section of Environmental Analysis' (SEA) review of all information available to date, and its independent analysis of the proposed rail construction and operation, all the comments and mitigation requested by various Federal, state, and local agencies, as well as other concerned parties, and the mitigation offered by Alamo North Texas Railroad Corporation (Alamo North), SEA preliminarily recommends that, if the Surface Transportation Board grants approval the proposed construction and operation, such approval be subject to the following conditions.

### **Biological Resources**

1. Alamo North shall avoid the potential for harassment of black-capped vireo by scheduling construction activities outside of the vireo nesting and breeding season, which generally runs from March through August. However, if construction is to occur between March and August, in accordance with the recommendations of the U.S. Fish and Wildlife Service (FWS), Alamo North shall check action areas for the presence of suitable vireo habitat. If suitable habitat is discovered Alamo North shall contact the appropriate office of FWS in Texas to discuss the need to conduct presence/absence surveys.
2. Alamo North shall consult with Celeste Brancel-Brown of the Texas Parks and Wildlife Department prior to construction regarding known locations and potential adverse impacts to sensitive species and natural communities near the proposed project area. Based on additional recommendations of the Texas Parks and Wildlife Department, Alamo North shall:
  - A) Minimize clearing of riparian vegetation to the greatest extent possible and use enhanced erosion control measures to reduce potential of sedimentation into water bodies associated with culverts. Revegetation plans for the disturbed areas shall include the use of site-specific native plant species that have high erosion control as well as high value for wildlife. Replacement of lost vegetation along the water bodies, especially trees and brush species, shall occur at a 2:1 ratio.
  - B) Construct the proposed railroad in a manner that minimizes the disturbance to existing vegetation. In particular, the line shall be routed to minimize the removal of mature trees or brush in the area. Revegetation efforts at any staging areas and other disturbed areas not directly associated with the actual railroad operations shall emphasize establishment of native trees, grasses, and leguminous forbs. Enhancement of existing native grasses or prairie remnants



shall be assisted by the reseeding of exposed areas with a mixture of native grasses and limited mowing practices.

### **Transportation**

3. In the event that County Road FM 1539 remains open, Alamo North shall consult with Wise County and install appropriate grade crossing safety devices prior to initiating rail operations.

### **Stream Crossing**

4. Based on the recommendations of the U.S. Army Corps of Engineers (COE), Alamo North shall make every attempt to restore the natural contours at the Village Creek Crossing to preserve existing ground elevations and flow path. No above ground fill shall be placed within the 100-year floodplain.
5. Based on the recommendations of COE, Alamo North shall reseed the area around Village Creek with natural vegetation as soon as it is as practicable to allow for permanent stabilization.
6. Alamo North shall abide by all terms and conditions of COE's Nationwide Permit 14.
7. For changes along the proposed route that encroach into the 100-year floodplain, Alamo North shall comply with Federal Emergency Management Agency regulations and shall coordinate these changes with the local floodplain administrator.

### **Pipeline Crossing**

8. Alamo North shall consult with the owners of each of the pipelines along the right-of-way prior to construction to ensure appropriate construction plans for rail-pipeline crossings, and to determine what safety concerns need to be addressed.

### **Erosion Control**

9. Alamo North shall consult with the U.S. Environmental Protection Agency and the Texas Natural Resource Conservation Commission prior to construction, prepare a stormwater pollution prevention plan to mitigate stormwater runoff impacts, and

apply for coverage under the general stormwater construction permit from the appropriate agency.

## **Land Use**

10. Where construction of the proposed rail line would cause unavoidable property severance, Alamo North shall negotiate with the appropriate land owner and provide access to the severed property.

